REMARKS

A review of the claims indicates that:

A) Claims 1, 2 and 4—22 remain in their original form.

B) Claims 1, 2 and 4—22 are currently in a state of non-final rejection.

In view of the following remarks, Applicant respectfully requests reconsideration of the rejected claims.

Section 102 (e) Rejections

Claims 1—9, 12—13 and 15—21 were rejected under §102(e) as being anticipated by U.S. Patent No. 6,404,511, hereinafter "Lin."

Prior to addressing these rejections directly, the Applicant discusses aspects of the Lin reference in a section entitled "The Lin Reference."

Additionally, it is clear that a point of misunderstanding exists with respect to the characteristics of a "least dynamic printer," as recited by claim 1 and others. Accordingly, the Applicant has included a brief section entitled "The Concept of a Least-Dynamic Printer," which discusses the concept of printer dynamics and "a least dynamic printer."

The Lin Reference

The Lin reference discloses a way to calibrate a network copy system (see Lin, at Title). Lin provides a technique to minimize variations in output images generated by different output devices (col. 9, lines 33—35). Lin notes that two printers of the same model can produce different output (col. 9, lines 15—18 and 27—30). In particular, Lin teaches that a reference

device may be selected, while the other devices are considered non-reference devices (col. 9, lines 37—43). Four 1-D look-up tables are created for each non-reference printer, so that the output of these printers is the same or very similar to the reference printer, i.e. the non-reference printers are calibrated to the reference printer (Abstract and other locations).

The Concept of a Least Dynamic Printer

The Applicant believes that a brief discussion of printer dynamics and the concept of "a least dynamic printer" would be helpful.

Referring briefly to the Applicant's Fig. 4 and page 9 of the specification, a graphical representation 400 of a CIELab color space is seen. A closed loop 402 represents a three-dimensional form enclosing the color gamut required for ideal printing of a color target. A second curve 404 represents the gamut printable by a particular printer. Note that the curve 404 is 'outside' of the loop 402; therefore, the printer having gamut 404 is fully able to print the target associated with the gamut 402. A third curve 406 is 'inside' curve 402. Accordingly, a printer having the gamut 406 is not fully able to print the target associated with the gamut 402. By comparison, the printer associated with the gamut 406 is less dynamic than the printer associated with the curve 404.

In another example, Fig. 5 and page 10—11 of the spec shows curves 506, 508 and 510 associated with three printers. Note that curve 506 is 'lighter' for all input values, than curves 508 and 510. The 'lighter' print

means that the printer is less able to put the required amount of ink on the paper, and therefore has less dynamic range. Therefore, curve 506 is associated with the printer having the least dynamic range within the group of three printers. (See page 10, lines 19—25.)

Thus, a less dynamic printer has a 'less dynamic' range, and is therefore less able to respond to some print data in the correct manner, as compared to a more dynamic printer. Thus, within a group of printers, a least dynamic printer is least able to print certain aspects of a print target or other print output. Note that, within different parts of a print gamut, different printers may be 'least dynamic.' Additionally note that, in different circumstances, color look-up tables could be used by non-least dynamic printers, to result in the same printout as the least dynamic printer.

Note the discussion of this section is not meant to interpret or limit the claims. Instead, this section is meant to provide general knowledge about printer dynamics.

Traversal of the §102 Rejections

Claims 1—9, 12—13 and 15—21 were rejected under §102(e) as being anticipated by U.S. Patent No. 6,404,511, hereinafter "Lin." In response, the Applicant respectfully traverses the rejection.

Claim 1 recites calculating look-up tables for a cluster of printers comprising:

- determining a least dynamic printer in the cluster; and
- calculating corrected input values required to normalize an output of at least one non-least dynamic printer in the cluster.

The Applicant's claim recites a least dynamic printer, and additionally of normalizing output of a non-least dynamic printers to the least dynamic printer.

In contrast, the Lin reference does not teach "determining a least dynamic printer in the cluster," as recited by claim 1. The Lin reference teaches assembling a group of printers and simply selecting one of them to be the reference printer (col. 9, lines 33-43). Thus, Lin does not teach determining a *least dynamic* printer in the cluster, or a reference printer that is least dynamic.

The Patent Office suggests that the reference printer is analogous to the "least dynamic printer" recited by the Applicant's claim. The Applicant respectfully disagrees.

In the Lin patent, the reference printer is not disclosed to be least dynamic or least responsive. Lin simply selects one of the printers to be the reference printer (col. 9, lines 40—43). In contrast, the Applicant recites "a least dynamic printer" as a target to which the non-least dynamic printers are normalized.

Therefore, Lin does not teach determining a least dynamic printer or even the existence of a least dynamic printer. It is a significant aspect of the Applicant's claim that the non-least dynamic printer(s) are normalized to the least dynamic printer. Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claim 2 depends from Claim 1 and is allowable due to its dependence from an allowable base claim. This claim is also allowable for its own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Claim 3 was previously cancelled.

Claim 4 recites:

- wherein a least dynamic printer is determined for each primary color.

In general, the Lin reference does not determine a least dynamic printer. In particular, Lin does not determine a least dynamic printer for each primary color.

The Patent Office suggests that col. 10, lines 44—60 disclose the recited subject matter. The Applicant respectfully traverses the rejection.

Column 10 discloses that transfer functions for each primary color are calculated, and that the non-reference printers may be calibrated to the reference printer. However, Lin does not disclose determining a least dynamic printer generally, and does not disclose determining a least dynamic printer for each primary color.

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claims 5 and 6 depend from Claim 1 and are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Claim 7 recites a method for calibrating a cluster of printers comprising:

- printing a calibration target with each printer in the cluster;
- measuring each calibration target to produce measurement data;
- calculating transfer functions for each printer in the cluster;
- determining a least dynamic printer in the cluster;
- calculating corrected input values required to normalize output of non-least dynamic printers in the cluster;
- organizing the corrected input values into look-up tables; and
- sending the look-up tables to each printer within the cluster.

Claim 7 recites "determining a least dynamic printer," which is not disclosed by the Lin reference. In fact, Lin is generally silent about how the reference printer is selected.

The Patent Office suggests that the reference printer 30A is analogous to the least dynamic printer. The Applicant respectfully disagrees.

The reference printer disclosed by Lin is not a "least dynamic printer." While the Applicant's least dynamic printer is a reference printer, the reference printer of Lin is not a least dynamic reference printer. In fact, Lin does not discuss the concept of a "least dynamic printer." Moreover, Lin does not disclose any selection process by which the "least dynamic" printer within the cluster is

determined. Lin simply selects a printer (the reference printer, column 9, line 41), and then calibrates the non-reference printers to that printer (Abstract, first two lines).

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claims 8, 9 and 12 depend from Claim 1 and are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Claim 13 recites calibrating a cluster of printers comprising:

- printing a calibration target with each printer in the cluster;
- measuring each calibration target to produce measurement data;
- calculating transfer functions for each primary color and for each printer in the cluster;
- determining a least dynamic printer in the cluster with respect to each primary color;
- calculating corrected input values required to normalize output of non-least dynamic printers in the cluster to the least dynamic printer in each cluster with respect to each primary color;
- organizing the corrected input values into look-up tables; and
- sending the look-up tables to each printer within the cluster for inclusion in a color data flow.

Claim 13 recites "determining a least dynamic printer in the cluster with respect to each primary color," which is not disclosed by the Lin reference. Therefore, the rejection of claim 13 is improper for the same reason the rejection

of claim 4 is improper. Accordingly, the argument with respect to claims 1 and 4 is incorporated at this location by reference.

The Patent Office suggests that columns 9—11 disclose determining a least dynamic printer. However, Lin does not disclose determining a least dynamic printer, generally. More specifically, Lin does not disclose determining a least dynamic printer with respect to each (or any) primary color(s).

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claim 15 recites a cluster of printers comprising:

- at least two printers;
- a transfer function calculator to derive a transfer function for each printer with respect to at least one color;
- a least dynamic response selector to determine a least dynamic printer from within the cluster of printers for at least one color;
- a normalizer for calculation of corrected input values required to normalize more dynamic printers' output with respect to the least dynamic printer; and
- a look-up table assembler to organize the corrected input values into look-up tables.

Claim 15 recites "a least dynamic response selector to determine a least dynamic printer from within the cluster of printers for at least one color," which is not disclosed by the Lin reference, which does not disclose selecting a least dynamic printer.

The Patent Office suggests that the selection of printer 30A indicates that Lin discloses a least dynamic response selector. However, nothing in Lin suggests or discloses the concept of a least dynamic response. In fact, the cited passage at column 9, lines 40—42 would make it appear the Lin simply picks on of the printers to be the reference (so that the other printers can be normalized to the selected reference printer). Nothing in Lin discloses selecting a reference printer that is a *least dynamic reference printer*.

Therefore, the Lin reference fails to disclose elements recited in the Applicant's claim. Accordingly, the section 102 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Claim 16 depends from Claim 15 and is allowable due to its dependence from an allowable base claim. This claim is also allowable for its own recited features that, in combination with those recited in Claim 1, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Claims 17—19 were rejected as corresponding to claims 7—12. Accordingly, the Applicant respectfully traverses the rejection, and incorporates by reference the arguments of claims 7—12.

Claims 20—21 were rejected as corresponding to claims 15—16. Accordingly, the Applicant respectfully traverses the rejection, and incorporates by reference the arguments of claims 15—16.

Traversal of the §103 Rejections

Claims 10, 11, 14 and 22 stand rejected under 35 U.S.C. §103(a) as being obvious over Lin in view of U.S. Pat. No. 6,172,771 hereinafter "Ikeda." In response, the Applicant respectfully traverses the rejection.

The Ikeda reference fails to remedy the failings of Lin. In particular, Ikeda fails to disclose "determining a least dynamic printer in the cluster." Because Ikeda fails to remedy Lin, the rejection of claims 7, 13 and 20, from which claims 10, 11, 14 and 22 depend, is improper.

Therefore, because claims 10, 11, 14 and 22 depend from claims 7, 13 and 20, these claims are allowable due to their dependence from an allowable base claim. These claims are also allowable for their own recited features that, in combination with those recited in their respective base claims, are neither disclosed nor suggested in references of record, either singly or in combination with one another.

Therefore, even in combination, the Lin and Ikeda references *fail to disclose elements recited in the Applicant's claim*. Accordingly, the section 103 rejection is improper, and the Applicant respectfully requests that the rejection be removed.

Conclusion

The Applicant submits that all of the claims are in condition for allowance and respectfully requests that a Notice of Allowability be issued. If the Office's next anticipated action is not the issuance of a Notice of Allowability, the Applicant respectfully requests that the undersigned attorney be contacted for scheduling an interview.

Respectfully Submitted,

Dated: 9-13-2005 By: _____

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